

# PATENT SPECIFICATION



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## PROVISIONAL SPECIFICATION.

### Improvements relating to Traps for Vermin and Wild Animals.

I, EDWARD PITCAIRN WRIGHT, of 200, Sheen Road, Richmond, Surrey, Engineer, a British subject, do hereby declare the nature of this invention to be as follows:—

This invention relates to traps for catching wild animals and vermin such as rats and mice and has for its object the construction of a trap which may be set in operation by the animal concerned without the necessity of the animals previously entering the trap. The general principle of the invention is the enclosing or the sweeping or flinging of the animal bodily into the trap when once the animal while still outside the trap has set the same in operation.

In carrying this invention into effect I construct a trap having as its central feature two or more gates of any convenient formation which are fixed to a central vertical axle, which axle is adapted to be rotated by a spring which may be wound up, or by a weight or other convenient contrivance and the rotation of which is controlled by any convenient form of escapement so that a prescribed measure of rotation is given to the axle carrying the gates on each occasion when the trap mechanism to be herein described is operated.

The axle and gates above described are set in definite relation to a part of the trap which has the nature of a cage and which is divided by a door of any convenient nature which opens into a closed part of the cage but will not open outwardly.

The relation of the rotatable gates and their axle, when at rest, to this cage is such that one or other of the gates carried by the axle always forms one end of the said cage and closes a part of the cage from which there is no exit but by

means of the inwardly opening door above described, which door admits only into the closed part of the cage.

Around the axle which carries the gates a small enclosure is formed from which the gates project and into which access is possible between any two gates. This enclosure is of sufficient size to contain a small piece of bait of any desired kind which may attract the animal. The escapement release by which the trap is operated is preferably within this enclosure but is in any case so situated with regard to the bait that the animal seeking to reach the bait must press its nose or shoulder or some other part of its body against this release and in doing so will operate the trap.

Immediately upon the actuating of the release the gates rotate rapidly through the prescribed distance so that the gate which closes the cage moves out of the way and the following gate sweeps the animal into the trap and takes the place of the preceding gate. A ratchet and pawl of any convenient kind prevents the return movement of the gates.

Two such rotating axles and gates may be used if desired each one co-operating with the other.

The axle may be horizontal instead of vertical if desired and may then be set above the ground where the animal runs and so the gates will sweep downwards to catch the animal or it may be set on the ground and so the gates will move upwards for the same purpose.

With a horizontal axis the bait holding cage and the escapement are necessarily constructed and placed differently to suit the different conditions.

Dated this 3rd day of June, 1927.  
EDWARD P. WRIGHT.

## COMPLETE SPECIFICATION.

### Improvements relating to Traps for Vermin and Wild Animals.

I, EDWARD PITCAIRN WRIGHT, of 200, Sheen Road, Richmond, Surrey, Engineer, a British subject, do hereby declare the nature of this invention and

in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

This invention relates to traps for catching wild animals and vermin such as rats and mice of the type in which the animal is swept through the entrance of a cage by a pivoted gate or wing that is actuated when the animal releases the escapement of the trap, the entrance of the trap being normally closed by another gate or wing mounted upon the same pivot as the first gate, a series of such gates acting in succession as sweeping devices for the trap and closing members for the cage. The invention consists in the construction of a trap of this type such that the animal in actuating the escapement does not tread on any part of the trap and is struck and swept into the confining part or cage by the sweeping gate while standing on the bare ground outside the trap.

The pivot and gates above described are set in definite relation to a part of the trap which has the nature of a cage and which is divided by a door of any convenient nature which opens into a closed part of the cage but will not open outwardly.

The relation of the rotatable gates and their pivot, when at rest, to this cage is such that one or other of the gates carried by the pivot always forms one end of the said cage and closes a part of the cage from which there is no exit but by means of the inwardly opened door above described, which door admits only into the closed part of the cage.

The escapement above referred to is located in any convenient relation to the gates and their axle and is operable by the movement of a rod or door or other suitable contrivance of such a character that in order to reach the bait the animal must press its nose or shoulder or some other part of its body against the same and by so doing will release the escapement, and these parts are so placed that the animal when thus operating the escapement in its endeavour to reach the bait must be standing on the bare ground in the path of the rotating gates.

Immediately upon the actuating of the release the gates rotate rapidly through the prescribed distance so that the gate which closes the cage moves out of the way and the following gate sweeps the animal into the trap and takes the place of the preceding gate. A ratchet and pawl of any convenient kind prevents the return movement of the gates.

The pivot may be horizontal or vertical if desired and may in the former case be set above the ground where the animal runs and so the gates will sweep downwards to catch the animal.

With a horizontal pivot the bait hold-

ing enclosure and the escapement are necessarily constructed and placed differently to suit the different conditions.

My invention may be more clearly understood by reference to the attached drawings which represent a preferred form of my invention and in which

Fig. 1 is a plan of a trap of vertical pivot type.

Fig. 2 is an elevation.

Figs. 3 and 4 is a plan and elevation respectively of a trap of the horizontal pivot type.

Referring to the drawings, A is a casing supporting the rotatable wings  $W^I$ ,  $W^{II}$ ,  $W^{III}$  and  $W^{IV}$  carried as one unit on the vertical axle V. At the side of the casing A is a cage C separated from or integral with the casing A and having a door  $d$  opening inwardly only to give access to the cage from the space  $w$  between the wings  $W^I$  and  $W^{II}$ .

A spring  $s$  housed in any convenient manner and articulated to the wings tends to rotate the wings in the direction of the arrow while an escapement  $e$  permits of their rotation through a quarter of a circle only each time the escapement is operated.

In the arrangement shown in the figures the bait is placed within a small enclosure  $b$  around the pivot of the wing structure and to which access is prevented by the rod  $r$  which operates the escapement.

The animal in attempting to reach the bait must press upon this rod by seeking to get into the bait box or must pull it by getting hold of the bait and seeking to withdraw the bait from the box, and in either case will operate the escapement. If desired the rod or other means may be set horizontally so that the animal desiring to reach the bait must raise the rod slightly in order to get under it and so will operate the escapement.

The wings then rotate and the wing  $W^{III}$  will sweep the animal before it enclosing it in the space  $w$ . The animal will then find itself encaged and will force it way through the door  $d$  which opens only inwardly to admit to the cage C from which there is no escape. A door  $d^I$  gives access to the part  $c^{II}$  for the removal of the animal. It will be observed that the bait will remain in the bait box and the trap will remain set after each movement of the wings.

Figs. 3 and 4 illustrate the arrangement with wings on a horizontal axis the parts bearing the same reference figures as in Figs. 1 and 2.

It will be understood that the above description and figures represent only preferred forms of the invention and are

not to be considered as essential as to arrangement and design such being obviously capable of a great variety without departing from the spirit of the invention.

Thus I may use any convenient actuating means for operating the wings and any kind of escapement and escape-ment release means. I may also use any convenient kind of bait box and may fix such box in any convenient relation to the trap and the cage. I may further use any number of wings and any shape of wing.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:—

1. In a rotatable gate trap for animals of the kind described a gate adapted to sweep across the bare ground on which the animal is treading when operating the trap in order to sweep the animal off the bare ground into the trap.

2. In a trap for vermin as claimed in Claim 1 spring or other operating means for actuating the gate and an escape-ment of convenient form permitting a predetermined movement of the gate

when the said escapement is operated by the animal.

3. In a trap for vermin as claimed in the preceding claims an escapement released by a rod or other means which obstructs the access to bait placed in any convenient position in relation to the trap and which rod operates the escape-ment when pressed against by the animal in its endeavours to obtain the bait.

4. In a trap for vermin as claimed in the preceding claims an escapement released by a rod or other means which obstructs the access to bait, placed in any convenient position in relation to the trap and which rod operates the escape-ment when pulled by the animal in its endeavours to obtain the bait.

5. In a trap for vermin as claimed in the preceding claims an escapement released by a rod or other means which obstructs the access to bait, placed in any convenient position in relation to the trap and which operates the escapement when lifted by the animal in its endeavours to obtain the bait.

Dated this 7th day of March, 1928.

G. PLUYL,

Agent for the Applicant.

[This Drawing is a reproduction of the Original on a reduced scale.]

